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APPLICATION N	D. F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,374	•	10/30/2000	Kent D. Chapman	4380.000400	2238
25555	7590	02/09/2006		EXAMINER	
	N WALKI		CLARDY, S		
SUITE 60		RAL EXPRESSWAY	ART UNIT	PAPER NUMBER	
RICHARDSON, TX 75080				1617	
				DATE MAILED: 02/09/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
		CHAPMAN ET AL.					
Office Action Summary	09/702,374	Art Unit					
cc.r.c.ac.r.ca.a.r.y	Examiner						
The MAII ING DATE of this communication and	S. Mark Clardy	1617					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA:  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w.  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 30 No.	ovember 2005.						
<i>;</i> —	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-17,20-43,46-50 and 59-89</u> is/are pending in the application.							
• • • • • • • • • • • • • • • • • • • •	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>1-17, 20-43, 48-50, 59-71, 73-82, and 85-89</u> is/are allowed.							
6)⊠ Claim(s) <u>72,83 and 84</u> is/are rejected.	Claim(s) 72,83 and 84 is/are rejected.						
7)⊠ Claim(s) <u>46 and 47</u> is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examine	r.						
10) The drawing(s) filed on is/are: a) accepted or b) be objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.							
Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)	_						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)					

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Claims 1-17, 20-43, 46-50, and 59-89 are pending in this application which claims benefit of US Provisional Application 60/162,178, filed October 28, 1999.

Applicants' claims are drawn to compositions (claims 1-17, 20-25, 59-61, 64-72, and 83-89), a kit (claim 26), and methods of delaying plant senescence (claims 27-43, 46-50, 62, 63, 73-82). The compositions comprise:

- A) N-acylethanolamine (NAE)): [C<sub>8-20</sub> alkyl] -CO-NH-EtOH
- B) a plant hormone: auxin (AUX), gibberellin (GB), or cytokinin (CK)
- C) a horticulturally acceptable carrier.

The N-acylethanolamines have been designated throughout the specification using an "NAEx:y" notation which is explained on page 10 of the specification. Most composition claims have been amended to limit the NAE concentration to between 0.1 to  $1000 \, \mu M$ .

Other composition components include:

nutrient materials (claims 10-11: lipid, carbohydrate<sup>1</sup>, or amino acid)

surfactant<sup>2</sup>

buffer (see list in claim 15)

osmoregulants<sup>3</sup>

biocidal agents (claim 20: antifungal, bacteriostatic, bactericidal<sup>4</sup> agents)

(soy) lecithin (claims 23, 61)

alcohol (claims 68-69; e.g., isopropanol)

Preferred NAEs appear to be N-lauroylethanolamine and N-myrisoylethanolamine (claim 23). The methods of delaying senescence make use of either the compositions as outlined above, or the NAE component alone (see for example claim 27).

<sup>&</sup>lt;sup>1</sup> Claim 11: lactose, dextrose, fructose, sucrose, glucose, sorbitol, mannitol, inositol

<sup>&</sup>lt;sup>2</sup> Claim 12: polyEO sorbitan monolaurate, monopalmitate monostearate, EO alkyl phenols, hydrogenated oil

<sup>&</sup>lt;sup>3</sup> Claim 17: a salt, carbohydrate, polyol, polyEO glycol

<sup>&</sup>lt;sup>4</sup> Claim 21: 8-hydroxyquinoline, dichloroisocyanurate, 1,3-dichloro5,5-dimethylhydantoin

Claims 46 and 47 are objected to because of the following informalities: Claim 46 is dependent on canceled claim 44 (and claim 47 on claim 46). Appropriate correction is required.

Claims 72, 83 and 84 remain rejected under 35 USC 103(a) as being unpatentable over Lambie et al (US 6,200,586), for reasons of record. These claims appear to have been inadvertently omitted when amending the claims to limit the composition concentration range to between 0.1 to 1000  $\mu$ M. Without such a limitation, they still read on the surfactant concentrations of the prior art. See the previous office action.

This application is in condition for allowance except for the following formal matters:

Claim 46 (and 47) are dependent on a canceled claim; claims 72, 83, and 84, still contain subject matter (high NAE concentration) which appears to have been inadvertently overlooked in the last amendment.

Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 571-272-0611. The examiner can normally be reached on 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ś. Mark Clardy

Primary Examiner
Art Unit 1617

February 6, 2006